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Patent
Attorney's Docket No. 028870-131

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of

David C. Greenspan et al.

Application No.: 09/164,293

Filed: October 1, 1998

For: COMPOSITION AND METHOD FOR
ACCELERATION OF WOUND
AND BURN HEALING



) Group Art Unit: 1617

) Examiner: D. SEAMAN

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RESPONSE PURSUANT TO 37 C.F.R. § 1.111

Assistant Commissioner of Patents and Trademarks
Washington, D.C. 20231

Sir:

In response to the Office Action dated July 18, 2000, Applicants first thank the Examiner for the withdrawal of the restriction requirement in the above-identified patent application. In view of the withdrawal of the restriction requirement, the pending claims are claims 12-13 and 18-26.

Claims 12-13 and 18-26 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Meiss, U.S.P. No. 5,000,746, in view of Low et al., U.S.P. No. 4,851,046, and Stoor et al., *Acta Odontol. Scand.*, 56:161-165 (1998). Applicants respectfully traverse this rejection.

Applicants first note that the Stoor et al. article is not prior art in this case since it is dated 1998 and the present application is a continuation of an application filed September 19, 1996. In view thereof, Applicants will not address the combination of the Stoor et al. article with the other cited patents.

Meiss is directed to a wound covering having connected discrete elements. The wound covering described is formed from a permeable web comprising ceramic or glass at least at the surface. The covering has either a plurality of individual elements either made

or coated with ceramic or glass and connected by means of connecting members into a network or a permeable base web provided with a layer of ceramic or glass. The elements can be made of a bioinert material or bioactive material such as a calcium phosphate, preferably tricalcium phosphate, or hydroxy apatite. The elements may also be formed of bioglass or bioglass ceramic materials. Meiss distinguishes this wound covering from those of the prior art as the opposite of previously known surgical dressings which utilized ceramic microparticles. *See column 1, lines 44-68.*

Low et al. is directed to a method and composition for repair of periodontal osseous defects based on particulate bioactive and biocompatible glass. This patent does not relate to a wound or burn dressing.

According to the Office Action, it would have been obvious to one of ordinary skill in the art to use the webbing material/fabric containing bioactive glass and antibiotics to treat wounds. However, this is not the claimed invention. The claimed invention, for example as set forth in claim 12, is a wound or burn dressing comprising a bandage, a topical antibiotic and non-interlinked particles of bioactive glass wherein the particles of bioactive glass are capable of contacting a wound or burn and thereby releasing Na, Ca or P into the wound or burn. This dressing has been found to accelerate healing and augment the natural healing process. Neither of the cited patents discloses such a wound or burn dressing as claimed. Meiss describes a web for a wound covering which protects the wound rather than accelerating healing. Low et al. merely describes a composition which works to repair periodontal osseous defects.

Moreover, the mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *M.P.E.P. § 2143.01*. Neither Meiss nor Low et al. provides the necessary motivation to combine the teachings of these patents. Meiss teaches away from such a combination since it teaches away from the use of non-interlinking particles. Low et al. also teaches away from the combination suggested by the Examiner. Low et al. specifically

provides information regarding the poor results obtained when materials taught by Meiss, such as tricalcium phosphate, or hydroxy apatite, are used.

In view of the particular teachings of both Meiss and Low et al., the combination of these patents is improper. Not only is there no suggestion to combine the teachings of Meiss and Low et al., but both references *teach away* from such a combination. Moreover, even were such a combination suggested by the art, a combination of these patents would not result in the claimed invention since Meiss teaches that non-interlinked particles should not be used in a wound dressing. In view thereof, Applicants respectfully request that this rejection be withdrawn.

Claims 22-23 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Meiss, U.S.P. No. 5,000,746, in view of Low et al., U.S.P. No. 4,851,046, Coleman et al., and Wood, and further in view of Loeffler et al. The rejection under 35 U.S.C. § 103 is respectfully traversed.

The publication date of Loeffler et al. is July 24, 1997, according to the abstract provided to Applicants. This date is confirmed on the PTO-892 received with the Office Action of October 1, 1999. The present application is a continuation of an application filed September 19, 1996. Therefore, the Loeffler et al. abstract is not prior art. 35 U.S.C. § 120. Since this rejection is based on a combination of Loeffler et al. and the remaining references, the rejection should be withdrawn.

In any event, as discussed above, the combination of Meiss and Low et al. would not have made the claimed invention obvious to one of ordinary skill in the art since each patent teaches away from the use of the materials as taught by the other patent. The addition of Coleman et al. and Wood does not remedy this deficiency of Meiss and Low et al. since neither of those documents provides the missing motivation to combine the primary references. Each is directed to a discussion of particular results in particular cases and would

not have led one of ordinary skill in the art to the claimed invention. Therefore, Applicants respectfully request that this rejection be withdrawn.

Applicants believe they have responded to all matters raised in the above referenced Office Action and that the application is now in condition for allowance. If the Examiner has any questions concerning this Application or this Reply and Amendment, he is invited to contact the undersigned.

Respectfully submitted,

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Dated: 11/20/00

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner of Patents and Trademarks, Washington, D.C. 20231, on 11-20-00

Donnie S. Dietrich
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Donnie S. Dietrich
(Signature of person signing the certificate)

Nov. 20, 2000
(Date of Signature)